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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,681	07/23/2003	Kohshiro Inomata	116655	6682
25944	7590	07/16/2007		
OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320			EXAMINER FIELDS, COURTNEY D	
			ART UNIT 2137	PAPER NUMBER
			MAIL DATE 07/16/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>		<b>Applicant(s)</b>	
	10/624,681		INOMATA ET AL.	
	<b>Examiner</b>		<b>Art Unit</b>	
	Courtney D. Fields		2137	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 29 March 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

1. Claims 5-8 have been amended.
2. Claims 1-15 are pending.

### *Response to Arguments*

3. Applicant's arguments with respect to claims 1 and 8 have been considered but are moot in view of the new ground(s) of rejection, Bledsoe (US Patent No. 4,700,175)

### *Claim Rejections - 35 USC § 103*

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Barbir (US Patent No. 6,122,379) in view of Bledsoe (US Patent No. 4,700,175).

Referring to the rejection of claims 1, 12, and 14, Barbir discloses a device, method, and computer readable medium for compressing and encrypting data, comprising:

a compressor for compressing original data with reference to a reference table  
(See Column 5, lines 41-44)

an encryptor for encrypting the original data using a compression/encryption table (See Column 5, lines 66-67 and Column 6, lines 1-2)

However, Barbir does not explicitly disclose that the reference table is encrypted, multiplexing of compressed data, and a demultiplexor for extracting compressed data.

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Bledsoe discloses a data communication method for compression of data by encoding using a modified Huffman code.

Bledsoe discloses an encryptor for encrypting the reference table itself or information necessary to reconstruct the reference table (See Column, lines 4, lines 54-68)

and a multiplexor for multiplexing compressed data obtained from the compressor and encrypted data obtained from the encryptor to create multiplexed data, wherein the multiplexed data is output as an encryption result (See Column 4, lines 16-22)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Barbir's compression and encryption method with Bledsoe's data communication with modified Huffman coding. Motivation for such an implementation would enable the encoding to be optimized for each port as a function of the type data being processed and ease the storage required in the ports to change the code tables as the type of data being processed by a given port is changed.

Referring to the rejection of claims 2 and 9, (Barbir as modified by Bledsoe) discloses the claimed limitation wherein the reference table is a quantization table determining quantization step size when quantizing values of respective frequency components of the original data (See Bledsoe, Column 4, lines 7-15)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Barbir's compression and encryption method with Bledsoe's data communication with modified Huffman coding. Motivation for such

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an implementation would enable the encoding to be optimized for each port as a function of the type data being processed and ease the storage required in the ports to change the code tables as the type of data being processed by a given port is changed.

Referring to the rejection of claims 3 and 10, (Barbir as modified by Bledsoe) discloses the claimed limitation wherein the reference table is a coding table determining a relationship between data values and code words when performing entropy encoding of data (See Bledsoe, Column 7, lines 64-68 and Column 8, lines 1-16)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Barbir's compression and encryption method with Bledsoe's data communication with modified Huffman coding. Motivation for such an implementation would enable the encoding to be optimized for each port as a function of the type data being processed and ease the storage required in the ports to change the code tables as the type of data being processed by a given port is changed.

Referring to the rejection of claim 4, (Barbir as modified by Bledsoe) discloses the claimed limitation wherein the encryptor encrypts parameters necessary for interpreting data acquired from decompression of the compressed data (See Bledsoe, Column 6, lines 23-39)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Barbir's compression and encryption method with Bledsoe's data communication with modified Huffman coding. Motivation for such an implementation would enable the encoding to be optimized for each port as a

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function of the type data being processed and ease the storage required in the ports to change the code tables as the type of data being processed by a given port is changed.

Referring to the rejection of claim 5, (Barbir as modified by Bledsoe) discloses the claimed limitation wherein the encryptor further encrypts partial data extracted from the compressed data by the data extractor, and the multiplexor multiplexes data remaining having the partial data removed from the compressed data with the encryption result from the encryptor to generate multiplexed data (See Bledsoe, Column 4, lines 41-49)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Barbir's compression and encryption method with Bledsoe's data communication with modified Huffman coding. Motivation for such an implementation would enable the encoding to be optimized for each port as a function of the type data being processed and ease the storage required in the ports to change the code tables as the type of data being processed by a given port is changed.

Referring to the rejection of claim 6, (Barbir as modified by Bledsoe) discloses the claimed limitation wherein the compressor performs data compression using a reference table that has been changed by the reference table changing means (See Bledsoe, Column 9, lines 64-68, Column 10, lines 13-28)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Barbir's compression and encryption method with Bledsoe's data communication with modified Huffman coding. Motivation for such an implementation would enable the encoding to be optimized for each port as a

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function of the type data being processed and ease the storage required in the ports to change the code tables as the type of data being processed by a given port is changed.

Referring to the rejection of claim 7, (Barbir as modified by Bledsoe) discloses the claimed limitation wherein the compressor performs data compression using a reference table that has been changed in size by the reference table changing means (See Bledsoe, Column 12, lines 57-65)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Barbir's compression and encryption method with Bledsoe's data communication with modified Huffman coding. Motivation for such an implementation would enable the encoding to be optimized for each port as a function of the type data being processed and ease the storage required in the ports to change the code tables as the type of data being processed by a given port is changed.

Referring to the rejection of claim 8, (Barbir as modified by Bledsoe) discloses a device for reproducing original data by decompressing and decrypting data that has been compressed and encrypted, comprising:

a demultiplexor for extracting compressed data which is a compressed result obtained by compressing the original data and encrypted data which is an encrypted result obtained by encrypting a reference table to be referenced when performing data compression of the compressed data from input multiplexed data (See Bledsoe, Column 4, lines 41-49)

a decoder for obtaining the reference table by decoding the encrypted data (See Bledsoe, Column 4, lines 49-53)



and a decompressor for referencing the reference table to decompress the compressed data, wherein decompressed data from the decompressor is output as a decoded result (See Bledsoe, Column 4, lines 54-68)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Barbir's compression and encryption method with Bledsoe's data communication with modified Huffman coding. Motivation for such an implementation would enable the encoding to be optimized for each port as a function of the type data being processed and ease the storage required in the ports to change the code tables as the type of data being processed by a given port is changed.

Referring to the rejection of claim 11, (Barbir as modified by Bledsoe) discloses the claimed limitation wherein partial data necessary to restore the original data is removed from the compressed data, the encrypted data is the reference table and partial data that has been removed from the compressed data encrypted, the decoder obtains the reference table and the partial data by decoding the encrypted data, and the decompressor complements the compressed data using the partial data obtained by the decoder and carries out decompression of the complemented result by referencing the reference table (See Bledsoe, Column 4, lines 41-49)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Barbir's compression and encryption method with Bledsoe's data communication with modified Huffman coding. Motivation for such an implementation would enable the encoding to be optimized for each port as a



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function of the type data being processed and ease the storage required in the ports to change the code tables as the type of data being processed by a given port is changed.

Referring to the rejection of claims 13 and 15, (Barbir as modified by Bledsoe) discloses a method and computer readable medium of decompressing and decrypting data that has been compressed and encrypted, comprising steps of:

extracting compressed data and encrypted data from input multiplexed data (See Bledsoe, Column 4, lines 41-49)

restoring a reference table to be referenced when carrying out data decompression by decoding the encrypted data (See Bledsoe, Column 4, lines 49-53)

and referencing the reference table to decompress the decompressed data and outputting the decompressed result (See Bledsoe, Column 4, lines 54-68)

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Barbir's compression and encryption method with Bledsoe's data communication with modified Huffman coding. Motivation for such an implementation would enable the encoding to be optimized for each port as a function of the type data being processed and ease the storage required in the ports to change the code tables as the type of data being processed by a given port is changed.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Courtney D. Fields whose telephone number is 571-272-3871. The examiner can normally be reached on Mon - Thurs. 6:00 - 4:00 pm; off every Friday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on 571-272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*cd*

cdf

July 8, 2007

*Matthew L. Smithers*  
MATTHEW SMITHERS  
PRIMARY EXAMINER  
*Art Unit 2137*